



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,747	08/28/2003	Cynthia L. Ebner	D-43641-01	5716

7590 03/02/2007
Howard Troffkin
7808 Ivey Mount Terrace
Potomac, MD 20854

EXAMINER

HAIDER, SAIRA BANO

ART UNIT	PAPER NUMBER
----------	--------------

1711

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/649,747

Applicant(s)

EBNER ET AL.

Examiner

Saira Haider

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 8, 13, 14 and 16-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 9-12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/13/2003 & 10/05/2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-16, and the species election of:
a first prepolymer (P^A) composed of mer units derived from (a) tetrahydrophthalic anhydride and (b) an alkanediol (such as hexanediol); and a second prepolymer (P^B) formed from caprolactone to have J groups selected from hydroxyl and/or carboxyl groups capable of reacting with the residual groups of (P^A) (reads on claims 1, 2, 3, 4, 7, 9, 10, 11, 12, and 15).

in the reply filed on 11/9/2006 is acknowledged. The traversal is on the ground(s) that a search burden does not exist. This is not found persuasive because the groups are classified in different areas and thus a search burden does indeed exist.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, 4, 9, 10, 11, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Matthews et al. (Us 6,254,803).
4. Matthews discloses an oxygen scavenger composition, for use in or with plastics materials, includes a polymer or oligomer having at least one cyclohexene group or functionality (abstract).
5. The oxygen scavenger composition can be present in a layer of a film adjacent to a polymeric layer (col. 13, line 44 to col. 14, line 15).

Art Unit: 1711

6. The oxygen scavenger composition is comprised of a transition metal salt, compound, or complex (col. 4, lines 46-50).

7. Additionally, the oxygen scavenging composition prepared from the reaction of a tetrahydrophthalic anhydride with at least one of a diol, a hydroxy compound, or polyhydroxy compound (col. 5, lines 11-15). Matthews further discloses that the above oxygen scavenging composition, wherein an alcohol or amine is present, the alcohol or amine is reacted with a styrene maleic anhydride copolymer, or other olefin maleic anhydride copolymer, and/or a polyfunctional isocyanate (col. 5, lines 45-52). Thus meeting the claimed limitations regarding the block copolymer comprised of the first prepolymer and second prepolymer.

8. Matthews discloses that the amount of polymeric scavenging component present in each layer in about 20 to about 90% (by weight) (col. 13, lines 26-33). Additionally, for each first prepolymer block there is exactly one second prepolymer block present in the compound, thus the amounts of each of the prepolymers in the composition is within the range of 20 to about 90 % (by weight).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1711

10. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews et al. (US 6,254,803) in view of Bezwada (US 5,133,739).

11. The disclosure of Matthews is provided above. Matthews fails to disclose that the second prepolymer is comprised of caprolactone. Thus attention is directed towards the Bezwada reference. Bezwada disclose that blocks of a copolymer of caprolactone and glycolide are considered "soft" blocks, which provide unexpectedly improved compliance (col. 3, lines 7-19). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the oxygen scavenger composition of Matthews a block copolymer comprised of the caprolactone, as taught by Bezwada. The motivation would be to improve the mechanical properties of the oxygen scavenger composition of Matthews and create a composition with improved compliance. In reference to the molecular weight limitation, it would have been obvious to one of ordinary skill in the art at the time of the invention to ensure that that the caprolactone block copolymer of Bezwada has a molecular weight of greater than 1,000 to ensure that the resulting composition is viscous enough to readily form a film.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saira Haider whose telephone number is (571) 272-3553. The examiner can normally be reached on Monday-Friday from 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saira Haider
Examiner
Art Unit 1711



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700